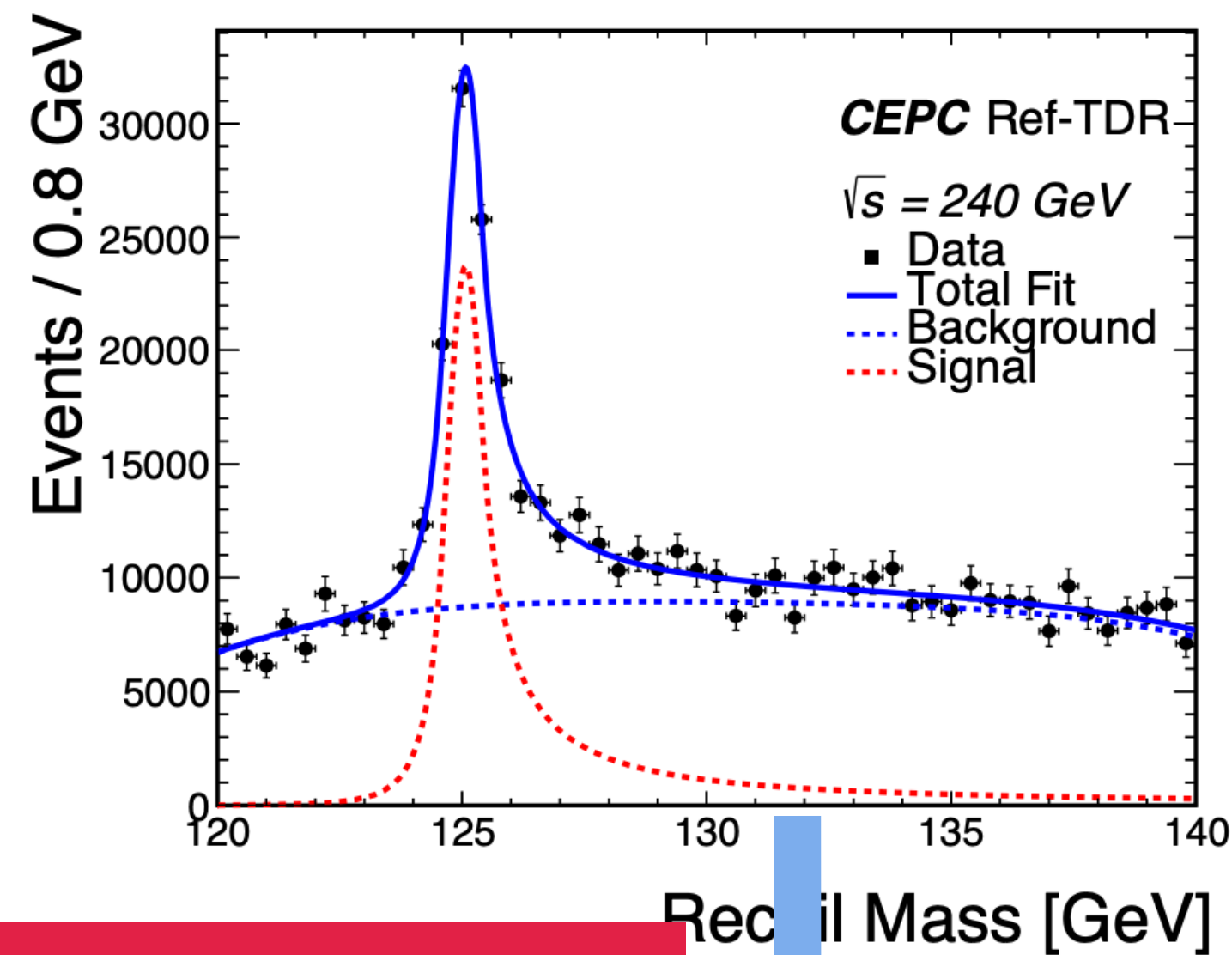


Status update

Chenguang Zhang / 23Jun2025

Recoil mass



Float BKG parameters

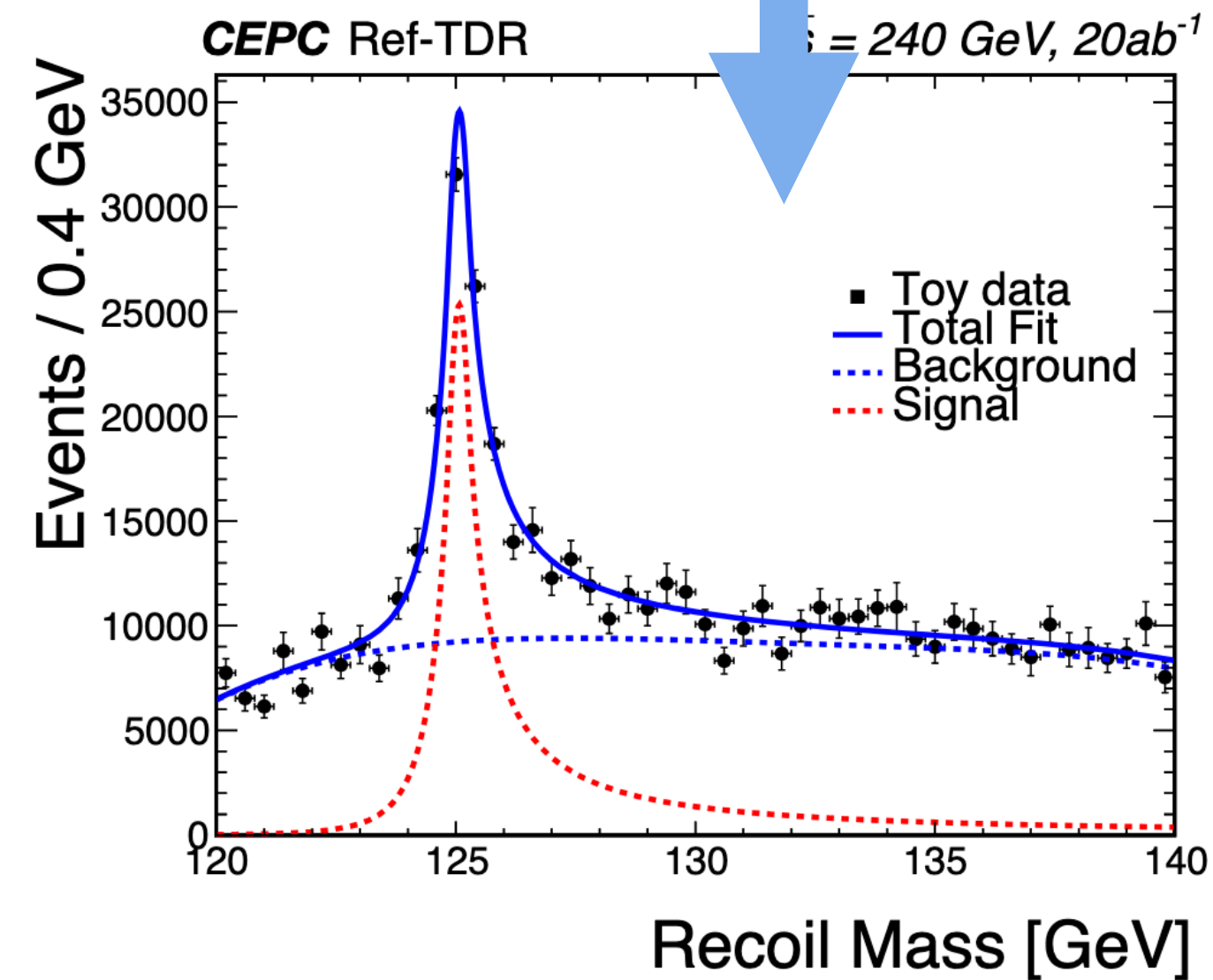
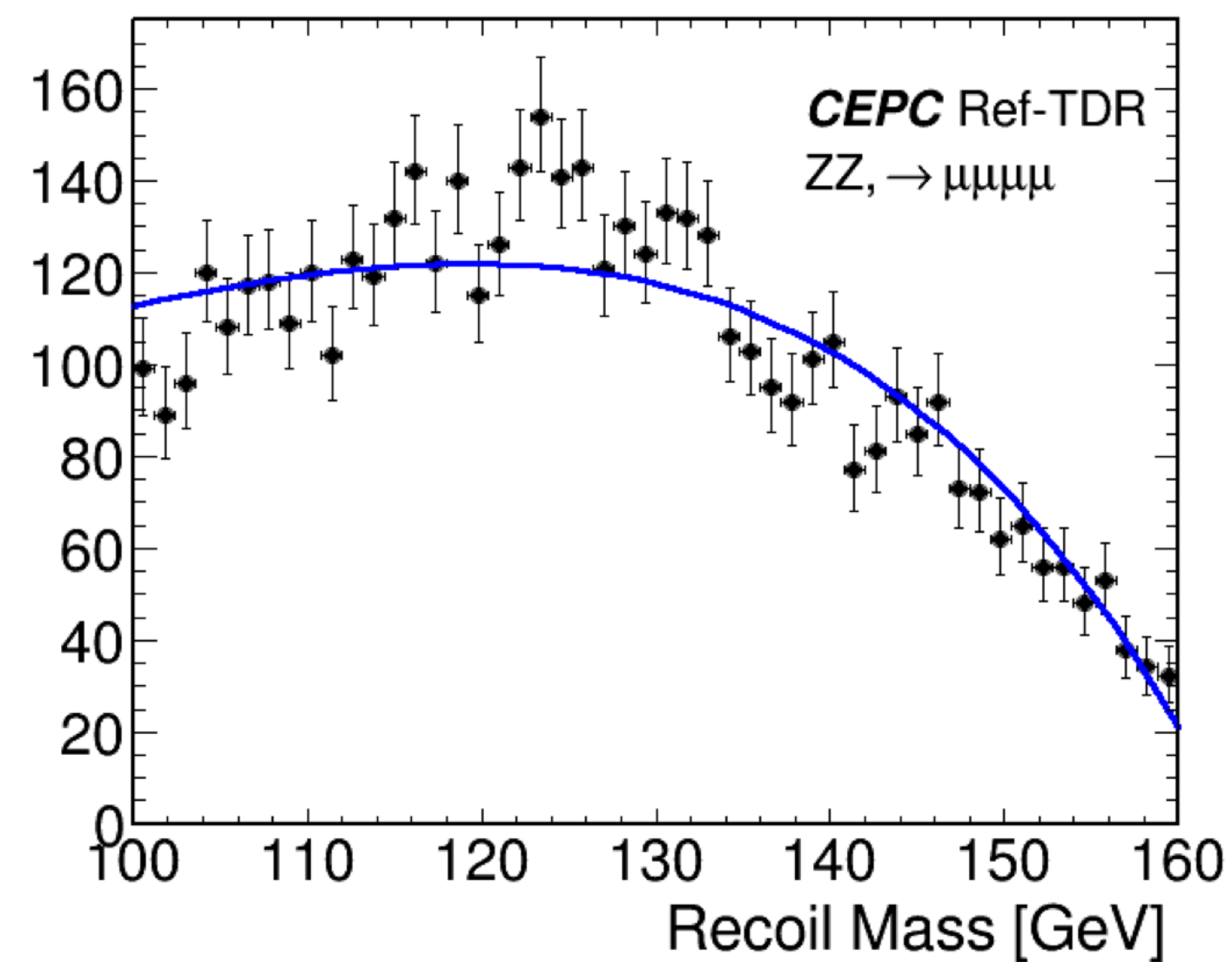


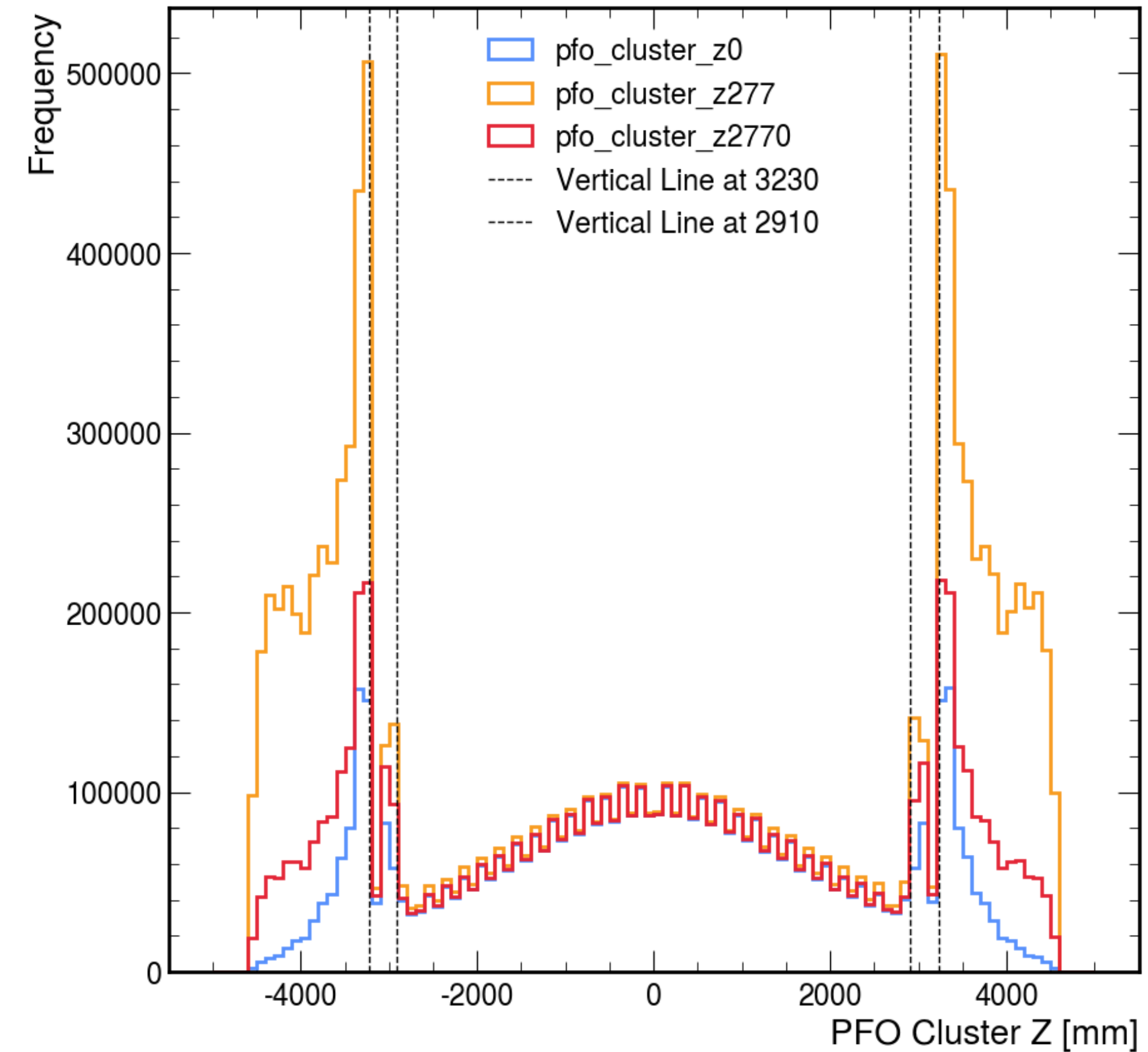
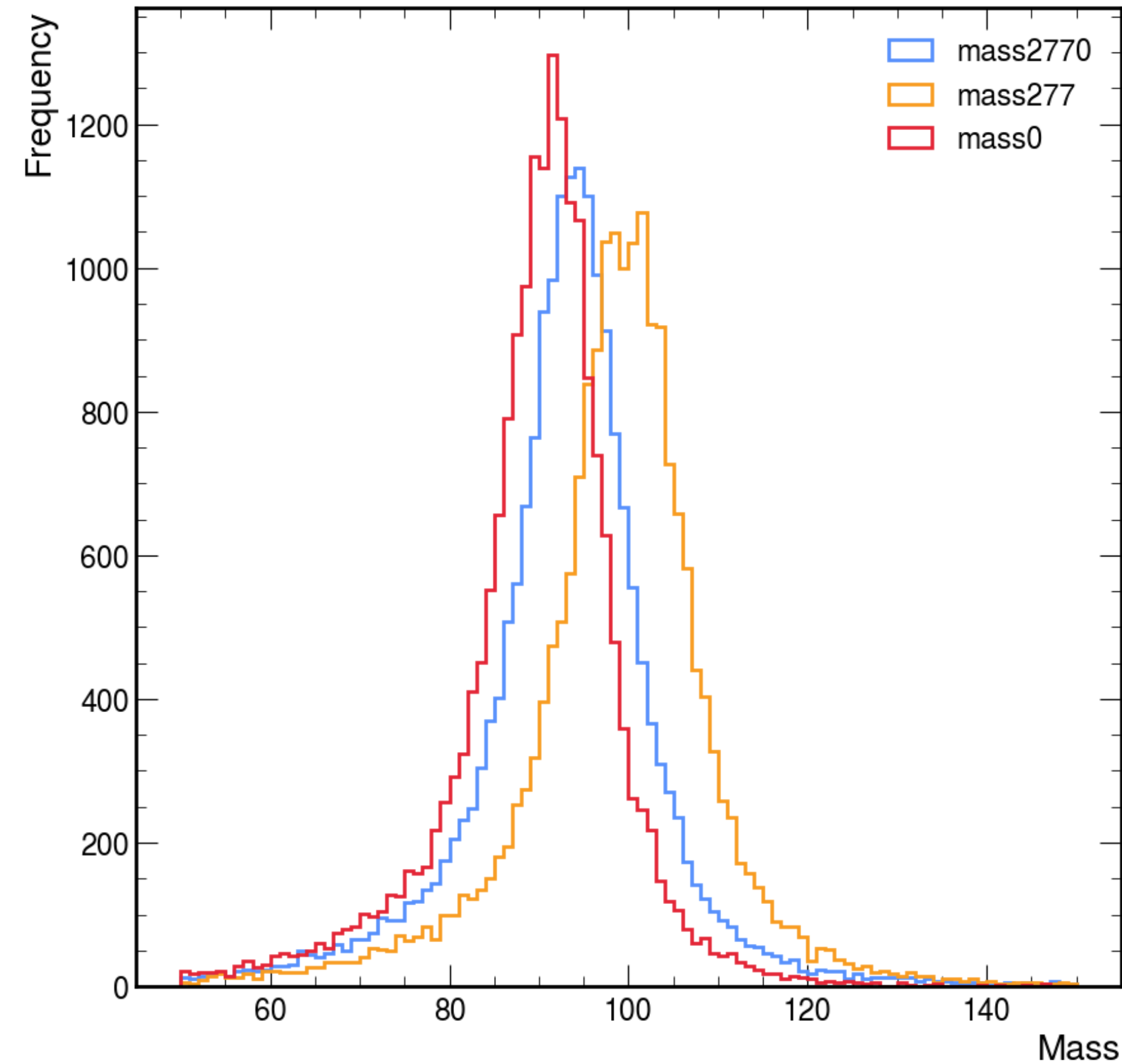
Table 15.5: Summary of event selections and cutflow. Four-fermion backgrounds are categorized by their final states

Final States	$2\nu 2\mu$	4μ	$2\mu 2e$	$2\mu 2q$	2μ	$\mu\mu H$
Events number	120000	40000	40000	80000	100000	40000
Muon pair	31.4%	41.7%	6.7%	29.5%	88.2%	95.6%
$M_{\mu\mu} \in [120, 140] \text{ GeV}$	5.8%	8.5%	1.1%	3.4%	42.0%	88.2%



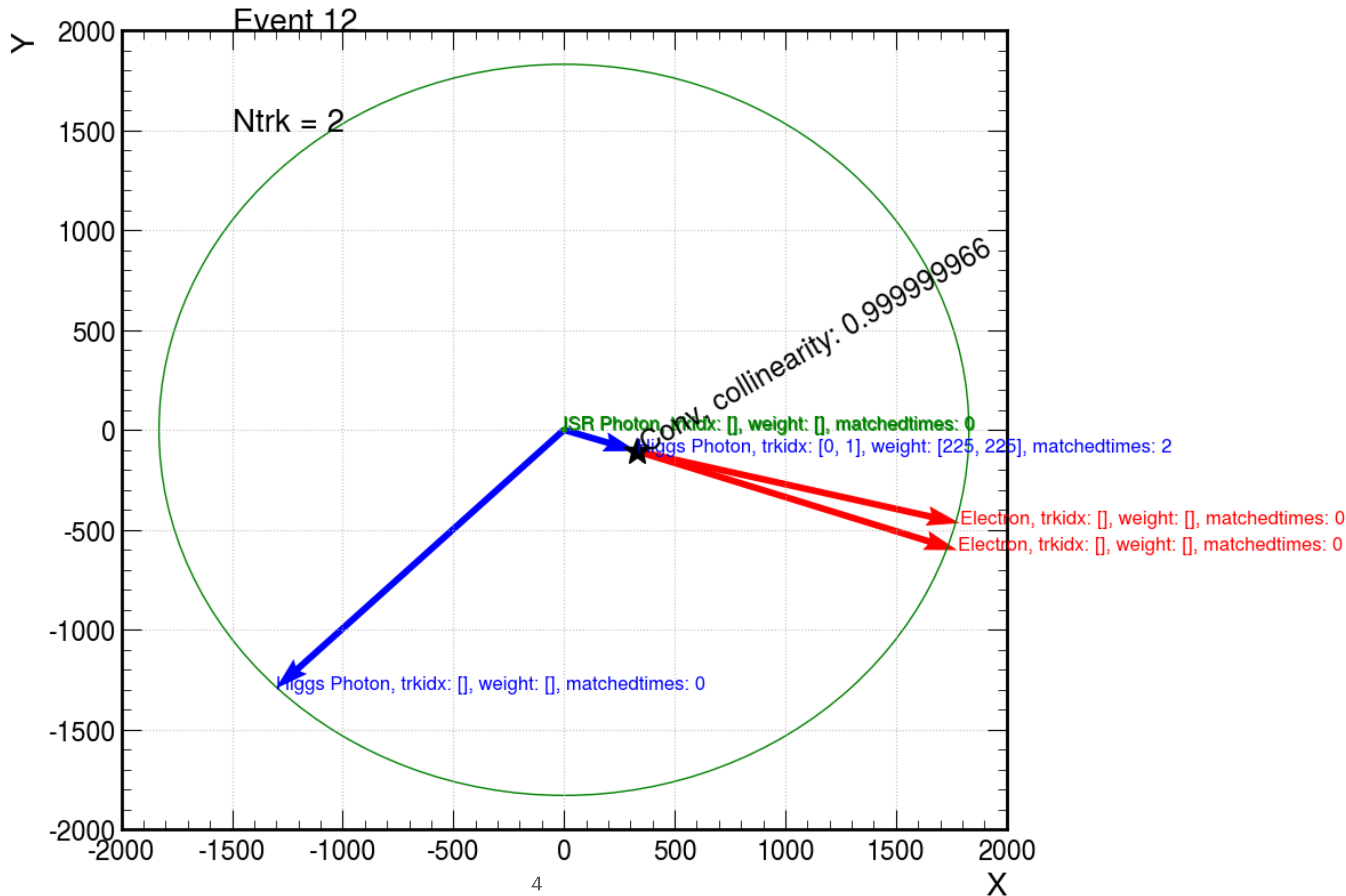
- Add the missing tautauμμ
- Optimise modelling

BIB

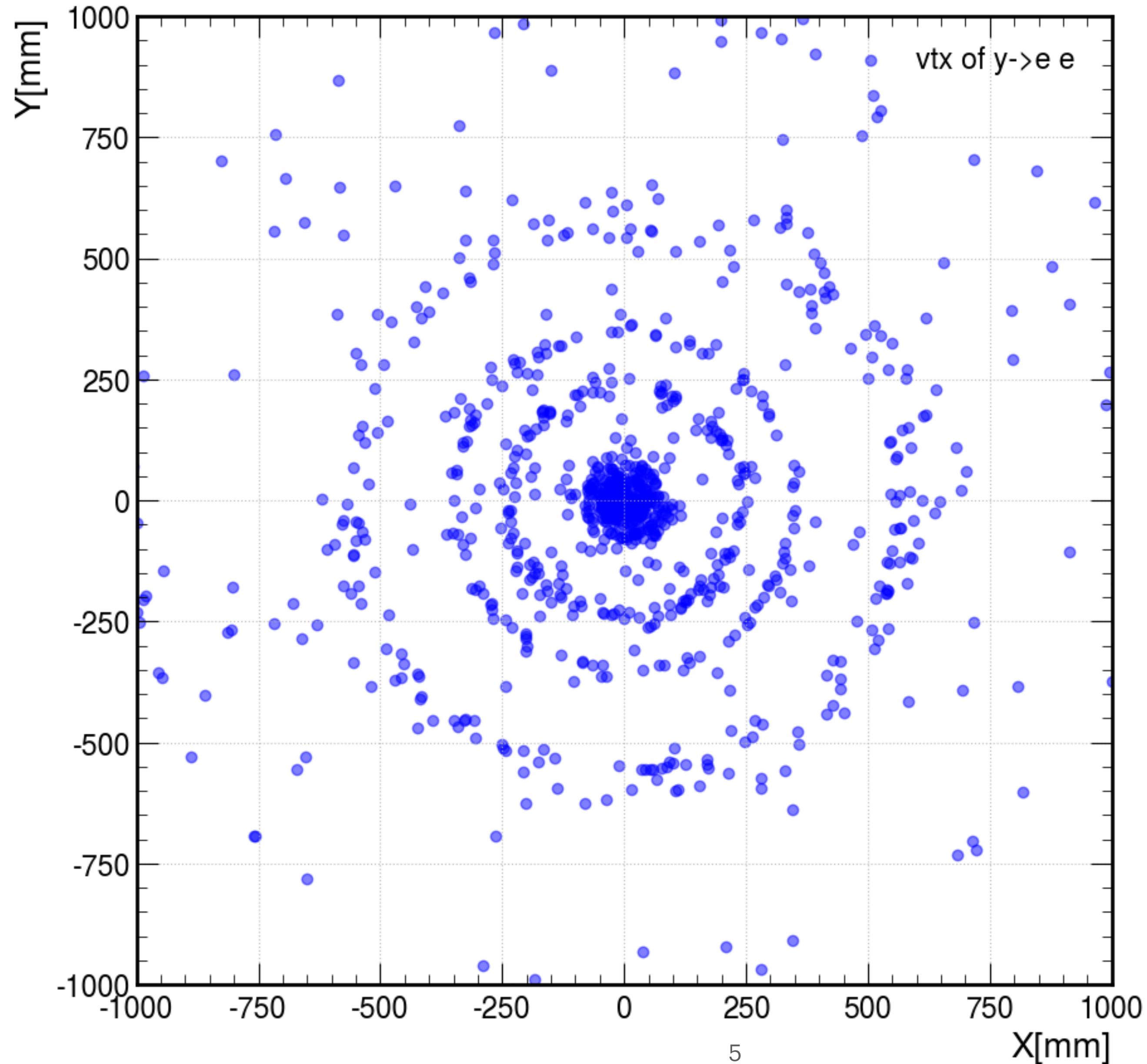


- Bunch spacing : 0 [NO BIB], 277, 2770
- In case 2770, 6 BX contributions for HCAL are missing. HCAL time-window 1000 ns

Photon conversion



Photon conversion



- $H \rightarrow \gamma\gamma$ events from Reda
- Preliminary result is fine